CHAPTER 3

ADHARABHUTA SIDDHANTA
(APPLICATION OF FUNDAMENTAL PRINCIPLES)

PAPER 1

Contents

- **Dravya Sangraha and Samrakshana:** Time of drug Collection, General Rules, Specific time for specific plant part collection, Time of the day for drug collection, Collection of Pranija Dravya, Place of Drug collection, Bhumi mahabhuta predominance, Places from where drugs should not be collected, Stage of drug collection, Rule of Duplication (Dwiguna Mana Ganana), Ardra and Shushka Dravya mana, Dravya Sangraha Vidhi and Dravya samrakshana, Rasa, Guna, Virya, Vipaka, Prabhava.
- **Anukta Visheshokta grahana:** Considering Anukta Dravya
- **Aushadha Namakarana:** Naming a Preparation
- **Aushadha Sevana Kala:** Time of Drug Administration
- **Saveeryata Avadhi** (Shelf life of different kalpana)
- **Aushadha Matra:** Dosage/Posology
- **Anupana & Sahapana** (Adjuvant)
- Yougika Dravya Siddhanta (Drug Combination)

Learning Outcome

At the end of this chapter, Students can able to

1. Elaborate fundamental principles of Ayurvediya Aushadhi Nirmana alongwith their classical references.
2. Explain Dravya Samgraha vidhi. Explain types of Bhumi desha and types of drugs to be collected from particular place & places from where Dravya should not be collected.
3. Describe time of Dravya collection.
4. Enlist parts of Sthavara & Jangama Dravyas used for Ayurvediya Aushadhi nirmana.
5. Discribe Ardra - Shushka Dravya & Anukta-Visheshokta paribhasha
6. Describe importance of kalpa sevana matra. Explain factors considered for deciding dosage of any drug. Describe Posology
7. Explain Saveeryata Avadhi (Shelf life) of Ayurvedic dosage forms.
8. Discuss Yogika Dravya Sidhdhanta (Drug combination)
9. Explain importance of Kala (Time) Samskara in Ayurvediya Aushadhi Nirmana. Elaborate Aushadhi sevana kala mentioned in Sharangdhara samhita.
10. Justify Aushadhi kalpa namakarana siddhanta with examples.

Introduction

Bheshaja Kalpana or the Pharmaceutical Science deals with the systematic preparation of medicines. In the process of preparation of medicines, the principles

adopted for the collection of raw materials, their preservation, process of preparation and therapeutics plays an important role in the preparation of good quality of medicine.

Principles For the Collection of Raw Materials

General Rule

गृह्णीयात्तानि सुमनाः शुचिः प्रातः सुवासरे।। आदित्यसंमुखो मौनी नमस्कृत्य शिवं हृदि। साधारणधराद्रव्यं गृह्णीया -दुत्तराश्रितम्।। बल्मीककुत्सितानूपश्मशानोषरमार्गजाः। जन्तुवहिहिमव्याप्तानौष्ध्यः कार्यसिद्धिदाः।। (Sha. Sam Pra. Kha 1/56-58)

Drugs should be collected in the early morning of an auspicious day after Sunrise, with a calm mind after performing prayer to Lord Shiva. Collect the drug which has grown in the Northern direction of the place where he is collecting the drug.

तत्र देशे साधारणे जाङ्गले वा यथा कालं शिशिरातपपवनसलिलसेविते समे शुचौ प्रदक्षिणोदके श्मशानचैत्यदे-वयज्ञनागार-सभा-श्वभ्राराम-वल्मीकोषरविरहितेकुशरोहिषास्तीर्णे स्निग्धकृष्णमधुरमृत्तिके सुवर्णवर्णमधुरमृत्तिके वा मृदा-वफालकृष्टेऽनुपहतेऽन्यैर्बलवत्तरैर्द्रुमैरौषधानि जातानि प्रशस्यन्ते।। (Cha. Sam, Ka. St, 1/9)

आग्नेया विन्ध्यशैलाद्याः सौम्यो हिमगिरिर्मतः। (Sha. Sam Pra. Kha 1/55)

Generally Ushna veerya drugs should be collected from Vindhya Mountain and Sheeta veerya drugs should be collected from Himalayan Mountain.

Qualities of the Drug Collector

मङ्गलाचारः कल्याणवृत्तः शुचिः शुक्लवासाः संपूज्य देवता अश्विनौ गोब्राह्मणांश्च कृतोपवासः प्राङ्मुख उदन्मुखो वा गृह्णीयात्।। (Cha. Sam, Ka. St 1/10)

The person who collects the drug should perform prayers, having good vertuous, clean, wearing white cloths, performed worship to God Ashwini Kumara, Cows and Brahmins, in empty stomach, turning towards north or east one should collect the drug.

Time of Drug Collection

गृह्णीयात्तानि सुमनाः शुचिः प्रातः सुवासरे। (Sha. Sam Pra. Kha, 1/56)

On auspicious day (on the day of Pushya Nakshatra, Sunday or Thursday) drugs should be collected in the early morning.

Season For the Drug Collection (General)

शरद्यखिलकार्यार्थं ग्राह्यं सरसमौषधम्। विरेकवमनार्थं च वसन्तान्ते समाहरेत्।। (Sha. Sam Pra. Kha, 1/59)

Sharad Ritu (October- November) is the best season to collect the drugs for the preparation of medicine for all the purposes. End of Vasantha ritu (March) is best for the drugs used for Vamana and Virechana.

Specific Season For the Collection of Drugs

तेषां शाखापलाशमचिरप्ररुढं वर्षावसन्तयोर्ग्राह्यं ग्रीष्मे मूलानि शिशिरे वा शीर्णप्ररूढपर्णानां, शरदि त्वक्कन्दक्षीराणि, हेमन्ते साराणि यथर्तुं पुष्पफलमिति। (Cha. Sam, Ka. St, 1/10)

अत्र केचिदाहुराचार्य्याः प्रावृड्वर्षाशरद्धेमन्तवसन्तग्रीष्मेषु यथासंख्यं मूलपत्रत्वक्क्षीरसारफलाभ्याददीते.....। (Su. Sam, Su. St 37/6)

कन्दं हित शिशिरे च मूलं पुष्प वसन्ते फलदंवदन्ति। प्रवाल पत्राणि निदाघकालेस्युः पञ्चजातानिशरत्प्रयोगे।। (R. Ni)

मूलानि शिशिरे ग्रीष्मे, पत्रं वर्षावसन्तयोः। कन्दानि शरदि क्षीरं, यथर्तुकुसुमं फलम्।।

हेमन्ते सारमोषध्या, गृहणीयात्कुशलोभिषक्।। (R. Paribhasha 4/59)

S.No.	Plant Part	Charaka Samhita	Sushruta Samhita	Raja Nighantu	Bhaishajya Ratnavali
1	Moola	Greeshma, Shishira	Pravrit	Shishira	Shishira, Greeshma
2	Patra	Varsha, Vasanta	Varsha	Shishira	Varsha, Vasanta
3	Shakha	Varsha, Vasanta	-	-	-
4	Pushpa	Yatha Ritu	-	Vasanta	Yatha Ritu
5	Phala	Yatha Ritu	Grishma	Vasanta	Yatha Ritu
6	Sara	Hemanta	Vasanta	-	Hemanta
7	Twak	Sharad	Sharad	-	-
8	Kanda	Sharad	-	Hemanta	Sharad
9	Kshira	Sharad	Hemanta	-	-
10	Panchanga	-	-	Sharad	

तत्रकेचिदाहुराचार्याः....तत्तुनसम्यक, सौम्याग्नेयत्त्वाज्जगतः सौम्यान्यौषधानि सौम्येष्वृतुष्वाददीतआग्नेयान्याग्नेयेषु....। (Su. Sam, Su. St, 37/7)

S.No	Dravya	Time of collection
1	Soumya (Sheeta Veerya)	Soumya Ritu (Vasanta, Hemanta and Shishira)
2	Agneya (Ushna Veerya)	Agneya Ritu (Sharad, Varsha and Greeshma)

ग्रीष्मे मूलानि शिशिरे वेतिकथनेनयान्याग्नेयानि तेषां मूलानि ग्रीष्मे, यानि सौम्यानि तेषां मूलानि शिशिरे, ग्राह्याणीतिव्यवस्थांसूचयति.....। (Cha. Sam, Ka. St 1/20, C.P)

Chakrapani mentioned that the root of Ushna veerya dravyas should be collected in Greeshma Ritu and the root of Sheeta veerya dravyas in Shishira ritu.

Time for the collection of the drug where whole plant is used

सर्वावयवसाध्येषुपलाशलवणादिषु। व्यवस्थितोनकालोऽस्तितत्रसर्वोविधीयते।। (Su. Sam, Su. St, 36/11)

If the medicine is prepared from the whole Plant, then there is specified time for the collection of the material.

Drug Collection Based on Mahabhoota Predominance

तत्र पृथिव्यम्बुगुणभूयिष्ठायां भूमौ जातानि विरेचनद्रव्याण्याददीत। अग्न्याकाशमारुतगुणभूयिष्ठायां वमनद्रव्याणि। उभयगुणभूयिष्ठायां उभयतोभागानि। आकाशगुणभूयिष्ठायां संशमनानि एवं बलवत्तराणि भवन्ति। (Su.Sam., Su. St, 36/6)

S.No.	Karma	Type of Bhoomi (Mahabhoota Predominance)
1	Virechana	Prithvi and Jala
2	Vamana	Agni, Akasha and Vayu
3	Ubhayatobhagahara	Prithvi, Jala, Agni, Akasha and Vayu
4	Shamana	Akasha

Drug Collection Based on Part of the Plant

अतिस्थूलजट याः स्युस्तासां ग्राह्यास्त्वचो बुधैः। गृह्णीयात्सूक्ष्ममूलानि सकलान्यपि बुद्धिमान्।
न्यग्रोधादेस्त्वचो ग्राह्याः सारः स्याद्बीजकादितः। तालीसादेश्च पत्राणि फलं स्यात् त्रिफलादितः।।
धातक्यादेश्च पुष्पाणि स्नुह्यादेः क्षीरमाहरेत्। (Sha. Sam Pra. Kha, 1/60-61)

S.No.	Parts of the Plant	Example
1	Moola Twak (root Bark)	Brihat Panchamoola
2	Whole root	Laghu Panchamoola
3	Twak (Stem Bark)	Nyagrodha
4	Saara(Pith)	Beejaka
5	Patra (Leaves)	Talisa
6	Phala (Fruit)	Triphala
7	Pushpa (Flower)	Dhataki
8	Ksheera (Latex)	Snuhi

Collection of Pranija (Jangama) Dravya

जङ्गमानां वयः स्थानां रक्तरोमनखादिकम्।
क्षीरमूत्रपुरीषाणि जीर्णाहारेषु संहरेत्।। (Su. Sam, Su. St, 36/16)

Pranija Dravya (Animal Products) which are used for the preparation of Medicine should be collected as mentioned by Sushrutha.

S.No.	Pranija Dravya	Collection time
1	Rakta (Blood)	Vayastha (Adult Animal)
2	Roma (Hair)	Vayastha (Adult Animal)
3	Nakha(Nail)	Vayastha (Adult Animal)
4	Ksheera (Milk)	Jeernahare (After the digestion of food)
5	Mutra(Urine)	Jeernahare (After the digestion of food)
6	Purisha (feces)	Jeernahare (After the digestion of food)

As per the Text Book of Pharmacognosy by T. E. Wallis

S.No.	Parts of the Plant	Season
1	Bark	Spring or early Summer
2	Leaves	Flowers are just beginning to expand or the flowering is just arriving at its height
3	Flowers	1. Fine and dry weather. 2. Flowers come to proper condition upon the inflorescence

As Per WHO

S.No.	Plant parts	Time and method of collection
1	Bulbs	Late autumn, long after the plant has flowered and fruited. Bulbs should be dug from considerable distance from the main plant. Collect mature big bulbs and leave small bulbs for regeneration. Bulbs/roots should be collected only after the seed shedding unless otherwise specified. It facilitates regeneration of species.
2	Bark	Autumn (after leaf fall) or spring (before development of leaves). Remove the bark in long vertical strips using a thin flexible blade bush knife. Stem bark should not be collected again from same tree unless adequate time has been allowed for it to regenerate completely. Do not practice ring barking, which is the cut off of entire rings around the tree. From annuals, shortly before flowering. From biennials, during the autumn or winter following the first year growth.
3	Root and rhizomes	From perennials, during autumn or winter following the second or third year's growth. Dig the root at a considerable distance, at least 30 cm, from the main stem or tap root. Avoid severing of the tap root. Do not collect all roots from the plant. Collect only the lateral roots.
4	Leaves	Collection should be made in dry weather whilst the plant is flowering. Pluck individual leaves instead of leaf striping and avoid use of sharp pruning shears for leaves. Collection in the morning is providing quality product in some plants (solanaceous leaves). Leaves should be harvested before or at the time of initiation of flowering unless otherwise specified.
5	Flowers	Collection should be made in dry weather and in early hours of the day, after due has dissipated. Harvest flowers carefully without damaging plant main stem. Flowers must be harvested when they have just opened or shortly afterwards to capture its aroma.

6	Seeds and fruits	Collection should be made when fruits are fully grown and ripe or nearly ripe until otherwise it is required. To avoid seed dispersal, it is advantageous to collect slightly earlier.In forest areas, only collect fruits from some trees and leave others completely for regeneration. Branches of the tree or shrub should not be cut for ease of collection of fruits and seeds.
7	Annual herbs/ whole plant	Annual herbs should be harvested at the time of initiation of flowering. Whole population in a given area should never be harvested. Adequate population should be left for regeneration to facilitate future collection.

Place from where Drugs should not be Collected

वल्मीक कुत्सितानूप श्मशानो ऊषर मार्गजाः। जन्तुवह्निहिमव्याप्तानौषध्यः कार्यसिद्धिदाः।।

(Sha. Sam Pra. Kha, 1/58)

Drugs used for the preparation of Medicine should not be collected from the places like Valmika (Ant Hill), Kutsita (Bheebatsa Sthana- Place where Black magic are Performing), Anupa (Marshy Land), Smashana (Burial Ground) Ushara (Saline Sand), Marga (Walking path), Jantu Pidita (Where poisonous animals dwells), Agnidagdha (place where fire burn occurred) and Himavyapta (covered by Snow).

Stage of Drug Collection

तत्र देशे साधारणे जाङ्गले वा यथाकालं शिशिरातपपवनसलिलसेविते समे शुचौप्रदक्षिणोदके श्मशान-चैत्यदेव-यज्ञनगार सभा श्वभ्राराम-वल्मीकोषरविरहिते कुशरोहिषास्तीर्णे स्निग्धकृष्णमधुरमृत्तिके सुवर्णमधुरमृत्तिके वामृदाव-फालकृष्टेऽनुपहतेऽन्यैर्बलवत्तरैर्दुर्मैरौषधानि जातानि प्रशस्यन्ते।। (Cha.Sam.,Ka.St., 1/9)

The drugs has be collected from Sadarana or Jangala desha, there should be proper Winter, Summer and Rainy season and the place should be flat and clean. In such places, the plants packed with Rasa, Guna, Veerya and Vipaka has to be collected.

Utilization of the Raw Materials

नवान्येव हियोज्यानिव्याण्यखिलकर्मसु। विना विडङ्गकृष्णाभ्यं गुडधान्याज्यमक्षिकैः।। (Sha. Sam Pra. Kha, ¼4)

When medicines are preparing, it is advised to use fresh drugs except for few drugs which should be used when they became purana(one year old) like Vidanga, Pippali, Guda, Ajya and Madhu.

विगन्धेनापरामृष्टम् अविपन्नं सादिभिः। नवं द्रव्यं पुराणं वाग्राह्यमेव विनिर्दिशेत्।। (Su. Sam, Su. St 36/15)

Sushruta Mentioned that we can use Nava and purana oushadha dravya for the preparation of medicines if all the Rasapanchakas are intact.

Rule of Dwiguna mana (Double the Quantity)

शुष्कं नवीनं यद् द्रव्यं योज्यं सकलकर्मसु। आर्द्रयद्विगुणं युञ्यादेष सर्वत्र निश्चयः। (Sha. Sam Pra. Kha, ¼6-47)

CHAPTER THREE

During the preparation of medicine at most care should be taken regarding the selection of drugs. Dry and Fresh raw materials have to be considered during the preparation. If fresh drug has to be taken it should be taken in double the quantity as recommended in the classics.

गुडूची कुटजो वासा कूष्माण्डश्च शतावरी। अश्वगन्धा सहचरी शतपुष्पा प्रसारिणी।।
प्रयोक्तव्यास द्वैवार्द्रा द्विगुणा नैव योजयेत्। (Sha. Sam Pra. Kha, 1⁄45)

Even though it is mentioned the double the quantity for fresh drugs, Guduchi, Kutaja, vasa, Kushmanda, Shatavari, Ashwagandha, Sahachara, Shatapushpa and Prasarani should not be taken in double the quantity.

शुष्कस्य गुरुतीक्ष्णत्वात्तस्मादर्द्धं प्रकीर्तितम्। (Vai.Pa. Pra.Pra. Kha 47)

As Shushka Dravyas are Guru and Teekshna, it should be taken in the same quantity as mentioned.

As fresh drugs contain larger quantity of water, the weight of water will also add up in the total weight of the drug. Hence it should be taken double the quantity.

Apart from the durgs mentioned by Sharangadhara, in Vaidyaka Paribhasha Pradeepa Prathama Khanda Nimba, Patola, Ketaki, Bala, Punarnava, Putigandha, Jatamamsi, Nagabala, Guggulu, Hingu, Ardraka, Ikshu vikara, Atibala, Hastikarna, Vatyalaka, Goraksha and Tandula should be taken in the same quantity as mentioned in the classics.

Ardra and Shushka Dravyamana

गुञ्जादिमानमारभ्य यावत्स्यात्कुडवस्थितिः। द्रवार्द्रशुष्कद्रव्याणां तावन्मानं समं मतम्।
(Sha. Sam Pra. Kha, 1/33-34)

In a single compound preparation, when dry drug, fresh drug and any liquid are using the quantity of the ingredients are mentioned as below

S.No.	Quantity of the Drugs	Drava (Liquid)	Ardra (Fresh Drug)	Shushka (Dry Drug)
1	1 gunja- 1 kudava	Quantity as mentioned	Quantity as mentioned	Quantity as mentioned
2	1 kudava- 1 tula	Double the quantity	Double the quantity	Double the quantity
3	1 tula and above	Quantity as mentioned	Quantity as mentioned	Quantity as mentioned

Dravya Samrakshana (Raw Drug Storage & Preservation)

गृहीत्वा चानुरूपगुणवद्भाजनस्थान्यगारेषु प्रागुदग्द्वारेषु निवातप्रवातैकदेशेषु नित्यपुष्पोपहारबलिकर्मवत्सु, अग्नि- सालालो-
ष्मस्वेद-धूम-रजो-मूषक-चतुष्पदामनभिगमनीयानि स्ववच्छन्नानि शिक्येष्वासज्य स्थापयेत्।। (Cha. Sa., K. St, 1/11)

The collected drugs should be stored in such a container that there should not be any untoward reaction between the drug and container. These containers should be placed in the racks which is in north or eastern part of the storage room. This should be closed from all the sides except one side for ventilation and in that side auspicious rituals are being performed like offering flowers, bali karma (Sacrifice). The place should be well protected from fire, water, moisture, smoke, dust, Rodents like rats, quadrupeds animals. The mouth of the vessel should be covered with proper lid and well protected

Rasadi Panchaka (Rasa, Guna, Veerya, Vipaka and Prabhava)

The knowledge of Rasa, Guna, Veerya, Vipaka and Prabhava of the drugs a very much essential while preparing the medicine. The proper combination of the Rasapanchaka enhances the therapeutic action of the drug by their synergetic actio If they are antagonistic, the desired therapeutic effect will not be there and sometim even it may cause adverse drug reaction. Hence the knowledge of Rasapanchaka is v much essential for those who are working in a production unit.

1. Anukta Visheshokta Paribhasha

In Ayurvedic classical text books while explaining the process of the prepara of medicine sometimes the process, time of administration, dosage, bhavana dravya are not specified in the references. In such condition the methods to be adopted explained as Anukta and Visheshokta Paribhasha.

कालेअनुक्ते प्रभातं स्यात् अङ्गे अनुक्ते जटा भवेत्। भागे अनुक्ते तु साम्यं स्यात्पात्रे अनुक्ते च मृन्मयम्।।
द्रवे अनुक्ते जलं ग्राह्यं तैले अनुक्ते तिलोद्भवम्। एकमप्यौषधंयोगेयस्मिन्यत्पुनरुच्यते।।
मानतोद्विगुणंकार्यंतद्द्रव्यंत्वदार्शभिः।। चूर्ण्यस्नेहासवालेहाः प्रयाशः श्वेचचन्दनान्विताः।
कषायलेपयोः प्रायोयुज्यतेरक्तचन्दनम्।। (Sha. Sam Pra. Kha, 1⁄47-50)

द्रवकार्येऽपिचानुक्तेसर्वत्रसलिलंस्मृतं। (Cha.Sa., K. St. 12/100)

S.No.	If not specified	To be considered
1	Kala (Time)	Prabhata (Early morning)
2	Anga (Part of the Plant)	Jata (Root)
3	Bhaga (Quantity of ingredients in a compound formulation)	Samya (Equal Quantity)
4	Patra (Vessel)	Mrinmaye (Earthen vessels)
5	Drava (Liquid)	Jala (Water)
6	Taila (Oil)	Tilodbhavam (Tila Taila-Sesame
7	Ksheera	Goksheera (Cow's Milk)
8	Ghrita	Goghrita (Cow's Ghee)
9	Mutra	Gomutra (Cow's Urine)
10	Lavana	Saindhava lavana (Rock salt)

Visheshokta Paribhasha

अतिस्थूलजटा या: स्युस्तासां ग्राह्यास्त्वचो बुधै:।। गृह्णीयात्सूक्ष्ममूलानि सकलान्यपि बुद्धिमान्।
न्यग्रोधादे स्त्वचो ग्राह्या: सार: स्याद्बीजकादित:।। तालीसादेश्च पत्राणि फलं स्यात्त्रिफलादित:।
ग्रातक्यादेश्च पुष्पाणि स्नुह्यादे: क्षीरमाहरेत्।। (Sha. Sam Pra. Kha. 1/60-62)
यतश्च पादनिर्देश: चतुर्भाग: ततश्च स:।। (Cha.Sa., K. St. 12/100)
द्रव्यप्रमाणंतुयदुक्तं अस्मिन्मध्येषुतत्कोष्ठवयोबलेषु।
तन्मूलमालम्ब्यभवेद्विकल्प्यंतेषां विकल्पोऽऽध्यधिकोनभाव:। (Cha. Sa., K. St. 12/86)
चूर्णस्नेहासवा लेह प्रायशश्चन्दनान्विता:।। कषायलेपयो: प्रायो युज्यते रक्तचन्दनम। (Sha. Sam Pra. Kha. 1/30)
एकमप्यौषधं योगे यस्मिन्यत्पुनरुच्यते। मानतो द्विगुणं प्रोक्तं तद् द्रव्यं तत्त्वदर्शिभि:।। (Sha. Sam Pra. Kha. [illegible])
व्याधेरयुक्तं यद् द्रव्यं गणोक्तमपि तत्त्यजेत्। अनुक्तमपिय द्युक्तं योजयेत्तत्र तद्बुध:।। (Sha. Sam Pra. Kha. 1/34)

S.No.	Special Consideration	To be considered
1	Atisthoola Jata (Big Roots)	Moola Twak (Root bark)
2	Sookshma moola (Small roots)	Moola (Whole root)
3	Nyagrodadi ksheeri vriksha (Pancha valkala)	Khanda Twak (Stem bark)
4	Beejaka, Chandana, Devadaru etc	Sara (Heart wood)
5	Talisa, Tulasi, Nagavalli, Kumari etc	Patra (Leaves)
6	Haritaki, Bibhitaki, Amalaki, Kush-manda, Karavellaka etc	Phala (Fruit)
7	Dhataki, Lavanga, Taruni	Pushpa (Flower)
8	Snuhi, Arka,	Ksheera(Latex)
9	Padavashesha	Reduction of the liquid to ¼th part
10	Dravya Pramana (Dosage of the Preparation)	Middle aged person having moderate built and digestive capacity
11	Chandana for the preparation of Choorna, Sneha, Asavarista, Avaleha	Sweta Chandana (White Sandal wood)
12	Chandana for Kashaya and Lepa	Rakta Chandana (Red Sandal wood)
13	If a drug is mentioned two times in a preparation	Double quantity should be taken
14	Deletion or addition of the drug	Considering the condition of roga and rogi, physician can delete or add the drug in a compound preparation

2. Aushadha Namakarana

In Classical text books we find thousands of compound preparations. These preparations are named based on certain criteria like the first drug of the formulation, Action, Dose, number of ingredients etc.

a. First ingredient in the formulation
   Eg :- 1. Talisadi Choorna, 2. Sitopaladi Choorna, 3. Punarnavastaka Kwata etc.
b. Rogadhikara (Main Indication)
   Eg :- Jwarankusha Rasa, Swasakutara Rasa, Swasakasa chintamani, Amavatari Rasa etc.
c. Important Ingredient of the formulation
   Eg :- Dashamoolarista, Arjunarista, Hinguleshwara rasa, Hingwastaka choorna etc.
d. Name of the person who formulated
   Eg :- Chyavanaprashavalehya, Agastyaharitaki lehya etc.
e. Therapeutic action of the formulation
   Eg :-Arogyavardhini vati, Arshakutara Rasa, Grahani kapata rasa
f. Based on the appearance
   Eg :- Rasamanikya, Swarnavanga
g. Based on the therapeutic dose
   Eg :- Shadbindu taila, Kamsaharitaki lehya
h. Time of collection of the drug
   Eg :- Pushyanuga Choorna
i. Method of Preparation
   Eg :- Shatadhouta Ghrita, Sahasradhouta ghrita, Putapakwa vishamajwarantaka louha
j. Based on the fame of the preparation
   Eg :- Tribhuvanakeerti Rasa, Trivikrama rasa, Trailokyachintamani Rasa
k. Based on similies
   Eg :- Kamadhenu Rasa, Kanakasundara rasa

3. Aushadha Sevana Kala (Time of Drug Administration)

In Ayurvedic therapeutics equal importance have given to the Oushadha, Dosage form and time of administration. Time of administration is mentioned in relation with Ahara sevana by all the Acharyas. There are differences of opinion regarding the number of Oushadha sevana kala.

भैषज्यकालो भुक्तादौ मध्ये पश्चान्मुहुर्मुहु: । समुद्गं भक्तसंयुक्तं ग्रासग्रासान्तरे दश ।। (Cha. Sam Chi. St. 30/298)

S.No.	Bheshaja Kala	Description
1	Bhaktadou-1	Before morning food
2	Bhaktadou-2	Before evening food
3	Madhye	In the midst of the food

4	Paschat-1	After Morning food
5	Paschat-2	After Evening food
6	Muhurmuhuhu	Frequently
7	Samudga	Before and after food
8	Bhaktasamyuktam	Mixed with food
9	Grasa	Mixed with each bolus of food
10	Grasantara	In between two boluses

तत्राभक्तं प्राग्भक्तम् अधोभक्तं मध्येभक्तम् अन्तराभक्तं सभक्तं सामुद्ग मुहुर्मुहुः ग्रासं ग्रासान्तरं च इति दशौषध-काला:।। (Su. Sam. U. St. 64/65)

S.No.	Bheshaja Kala	Description
1	Abhakta	In empty stomach
2	Pragbhakta	Before food
3	Adhobhakta	After food
4	Madhyebhakta	In the midst of the food
5	Antarabhakta	In between the two meals
6	Sabhakta	Mixed with the food
7	Samudga	Before and after food
8	Muhurmuhuhu	Frequently
9	Grasa	Mixed with each bolus of food
10	Grasantara	In between two boluses

तद्यथा अभक्तं, प्राग्भक्तं, मध्यभक्तं, अधोभक्तं, सभक्तं, अनन्तरभक्तं, सामुद्गं, मुहुर्मुहुः सग्रासं, ग्रासान्तरं, निशि च।। (A. San, Su. St 23)

युञ्ज्यादनन्नमन्नादौ मध्येऽन्ने कवलान्तरे। ग्रासेग्रासेमुहुः सान्नं सामुद्गं निशि चौषधम्।। (A. Hri, Su. St 13/37)

S.No.	Bheshaja Kala	Description
1	Abhakta	In empty stomach
2	Pragbhakta	Before food
3	Adhobhakta	After food
4	Madhyebhakta	In the midst of the food
5	Antarabhakta	In between the two meals
6	Sabhakta	Mixed with the food
7	Samudga	Before and after food
8	Muhurmuhuhu	Frequently

9	Grasa	Mixed with each bolus of food
10	Grasantara	In between two boluses
11	Nishi	Night

ज्ञेयः पञ्चविधः कालोभैषज्यग्रहणेनृणाम्। किञ्चित्सुर्योदयेजातेतथादिवसभोजने।। सायन्तनेभोजनेचमुहुश्चापितथानिशि। (Sha. Sam Pra. Kha, 2/2-3)

S.No.	Bheshaja Kala	Description
1	Suryodaya	Early morning during sun rise
2	Divasabhojana	First Annakala (Morning)
3	Sayam bhojana	Second Annakala (Evening)
4	Muhurmuhuhu	Frequently
5	Nishi	Night

These Bhaishajya kala has its own significance depending upon the dosha involved, disease, for shodhana purpose etc., The detailed explanation of these Bhaishajya kala can be understood as follows

1. Abhakta

व्यानेतुप्रातरशितं।। (Cha. Sam, Chi. St, 30/299)

Drug is administered early morning in empty stomach is known as Abhakta. It is indicated in Vyana vayu vikruti.

तत्राभक्तंतुयत्केवलमेवौषधमुपयुज्यते। वीर्याधिकंभवतिभेषजमन्नहीनंहन्यात्तथाऽऽमयमसंशयमाशुचैव। तद्बालवृद्धवनितामृदवस्तुपीत्वाग्लानिंपरांसमुपयन्तिबलक्षयंच। (Su. Sam. U. St, 64/69)

The Veerya of the drug administered in Abhakta kala becomes more potent in the absence of food and cures the disease promptly. Drugs should not be administered in Bala, Vriddha, Vanita and mridu personality in order to avoid Glani and Bala kshaya.

प्राय: पित्तकफोद्रेके विरेकवमनार्थयो:। लेखनार्थ च भैषज्यं प्रभाते तत्समाहरेत्।। भैषज्यमभ्यवहरेत्प्रभाते प्रायशो बुध:। कषायांश्च विशेषेण तत्रभेदस्तुदर्शित:।। (Sha. Sam Pra. Kha, 2/1)

As per Sharangadhara, Suryodaya can be compared to Abhakta, Drugs are administered for Pitta kaphodreka, Virechana, Vamana and Lekhana purpose. Usually Kashayas can be administered in the same kala.

यत्राहारेजीर्णभेषजं, भेषजेजीर्णेचाहार: तत् अनन्नम् अभक्तंनाम। (A. Hri, Hemadri)

Hemadri mentioned this kala as Ananna. Here the drug is administered in empty stomach early morning after the complete digestion of the previous night food.

2. Pragbhakta

प्राग्भक्तं नाम-यत्प्राग्भक्तस्योपयुज्यते। शीघ्रंविपाकमुपयातिबलंनहिंस्यादन्नावृतंनचमुहुर्वदनान्निरेति।
प्राग्भक्तसेवितमथौषधमेतदेवदद्याच्चवृद्ध-शिशु-भीरु-कृशाङ्गनाभ्यः।। (Su. Sam. U. St, 64/71)

Pragbhakta is the administration of drug before food. Here the drug gets digested easily and doesn't cause any harm to the strength, doesn't cause Chardi. It is indicated in Children, Geriatric people, frightened person and very lean persons.

प्राग्भक्तंनामयदनन्तरभक्तम्। तदपानानिलविकृतावथः कायस्यचबलाधानार्थंतद्गतेषुचव्याधिषुप्रशमनयकृशीकरणार्थंचयोज्यम्। (A. Sam, Su. St 64/14)

Drugs administered in Pragbhakta is indicated in Apana vayu vikruti. It gives strength to Adhah Kaya(lower limbs), diseases of the lower limbs, and Krishikarana (Vajikarana).

3. Adhobhakta

अधोभक्तं नाम-यद्धोभक्तस्येति। पीतंयदन्नमुपयुज्यतदूर्ध्वकाये, हन्याद्गदान्बहुविधांश्चबलं ददाति।
(Su. Sam. U. St, 64/74)

The drug administered after the food is called Adhobhakta. It is indicated for the diseases of Urdhwa jatru vikaras (Head and Neck). It helps to gain strength of the body.

अधोभक्तं भक्तादनन्तरम्। तत्तु व्यानविकृतौ प्रातराशान्तमुदानविकृतौ पुनः सायमाशान्तम्पूर्वकयस्यचव लाघानार्थतद्गतेषुव्याधिषु च श्लेष्मिकेषु च प्रशमायस्थूलीकरणार्थंच। (A. Sam, Su. St 23/16)

Drugs should be administered after the food in the morning and evening in vyana and Udana vayu vikruti respectively. It is also indicated in strengthening and in the diseases of adhakaya, Kaphaja vyadhis and for the brimhana purpose.

4. Madhye bhakta

मध्येभक्तं नाम- यन्मध्येभक्तस्यपीयते। मध्ये तु पीतमपहन्त्यविसाभिावाद्ये मध्यदेहमभिभूयभ्वन्तिरोगः।।
(Su. Sam. U. St, 64/74)

The Drug administered in the middle of the food is known as Madhye Bhakta. It is indicated in Samana vatavikara, Pittaja vyadhi, Diseases of the Madhya shareera. (Kosthagata vikaras).

समाने मध्यभोजनम्। (Cha. Sam, Chi. St, 30/299)

Madhye Bhakta bheshaja kala is indicated in Samana vata Vikara.

5. Antara bhakta

अन्तराभक्तं नाम-यदन्तरापीयते पूर्वापरयोर्भक्तयोः। हृद्यं मनोबलकरं त्वथदीपनं च पथ्यं सदा भवति चान्तरभक्तकं यत्। (Su. Sam. U. St, 64/77)

Drugs administered in between the two meals after the digestion of the morning meals. It acts as Hridya, increases mental stability, deepana and pathya.

अन्तराभक्तं यत्पूर्वनिभक्ते जीर्णेमध्याह्ने भेषजमुपयुज्यते, तस्मिंश्चजीर्णे पुनरपरानेभोजनम्। तद्दीप्ताग्नेव्यानजेष्वामयेषु।
(A. Sam, Su. St 23/18)

Drugs administered in between the two meals after the digestion of the morning meals. It acts as Deepana and indicated in vyana vayu vikara.

6. Sabhakta

सभक्तं नामयत्सहभक्तेन।। पथ्यं सभक्तमबलाबलयोर्हि नित्यं, तद्वद्वेषिणामपि तथा शिशुवृद्धयोश्च।
(Su. Sam. U. St, 64/76-77)

The Drugs administered along with the food is called Sabhakta. It is indicated in Children and Geriatrics. Pathya oushadhis are administered along with foods.

सभक्तं यदन्नेन समंसाधितं पश्चाद्वासमालोडितम्। यद्वालेषुसुकुमारेष्वौषध द्वेषिष्वरुचौ सर्वागगेषु च रोगेषु।
(A. Sam, Su. St 23/17)

The drug is administered mixed with the food or the food is prepared using the drugs is called Sabhakta It is indicated in bala (children), Sukumara (Delicate), those who are having aversion for food and Sarvanga Vikara.

7. Samudga

सामुद्गं नाम-यद्भक्तस्यादावन्ते च पीयते।। दोषेद्विधाप्रविसृते तु समुद्गसंज्ञमाद्यन्तयोर्यदशनस्य निषेव्यते तु।
(Su. Sam. U. St, 64/79)

लघ्वल्पान्नयुक्तं पाचनावलेह चूर्णादि हिध्मायां कम्पाक्षेपयोरुध्वधस्संश्रये च दोषे। (A. Sam, Su. St 23/19)

Drugs are administered just before and after the meal is called Samudga. Usually Pachana oushadhis, Avaleha, Choorna and Laghu guna drugs are administered. It is indicated in Hikka, Kampavata, Akshepaka, Urdhwa and Adhah shareera rogas.

8. Muhurmuhuhu

मुहुर्मुहुनाम-सभक्तमभक्तं वायदौषधं मुहुर्मुहुरुपयुज्यते।। श्वासे मुहुर्मुहुरतिप्रसृते च कासे, हिक्कावमीषुसवदन्युपयोज्यमेतत। (Su. Sam. Su. St, 64/81)

मुहुर्मुहुस्तुपुनः पुनर्भुक्ते यदभुक्ते वा। तच्छ्वास कास हिध्मा तृट् छर्दिषु विषनिमित्तेषु च विकारेषु। (A. Sam, Su. St 23/20)

Drugs are administered in a specific time interval again and again. It is Indicated in Swasa, Kasa, Hikka, Chardi and Visha vikaras.

9. Sagrasa

ग्रासं तु यत्पिण्डव्यामिश्रम्। ग्रासेषुचूर्णबलाग्निषु दीपनीयं, वाजीकराण्यपि तु योजयितुं यतेत।
(Su. Sam. U. St, 64/84)

सग्रासं यत्ग्राससम्पृक्तम्। तथा सग्रासं चूर्णलेहवटकादिकमग्निदीपनं वाजीकरणानि चोप्युञ्जीत।
(A. Sam, Su. St 23/21)

Drugs are administered along with each bolus of the food. It is indicated in Prana vayu vitiation. The drugs like Agnidepaka, Vajikara, Vati and lehas are administered.

10. Grasantara

ग्रासान्तरं तु-यद्ग्रासान्तरेषु।। (ग्रासान्तरं यदुभयोर्ग्रासयोर्मध्ये प्रयुज्यते। इतिपा. भे.)
ग्रासान्तरेषुवितरेद्वमनीयधूमान्, श्वासादिषुप्रथितदृष्टगुणांश्चलेहान् । (Su. Sam. U. St, 64/84)

ग्रासान्तरं यद्ग्रासयार्भासयोर्यासयोर्मध्येद्वयमप्येतत्प्राणानिलविकृतौ।
ग्रासान्तरंहृद्रोगवमनंधूमञ्च। (A. Sam, Su. St 23/20)

Drugs are administered in between the bolus of food. It is indicated in Jatrurdhwa Rogas, Vamaneeya Dhoomapana, Leha in Swasa, hridroga and Prana vayu vikruti.

11. Nishi

वमनं धूमं च जत्रूर्ध्वामयेषु तु निशायाम्। (A. Sam, Su. St 23)
ऊर्ध्वजत्रुविकारेषु स्वप्नकाले प्रशस्यते। (A. Hri, Su. St 13/41)

Drugs are administered at bed time is called Nishi. It is indicated in Jatrurdhwa rogas, Vamana Dhoomapana, Malakaraka and Virechana.

4. Saveeryata Avadhi (Shelf Life)

Shelf life is the time during which the product, if stored appropriately as per the manufacturer's instructions, will retain fitness for use. Shelf life is related with the quality of the drug. In Ayurvedic classics, detailed explanation is available. Sharangadhara explained this in Prathama Khanda first chapter.

गुणहीनं भवेद्वर्षादूर्ध्वं तद्रूपमौषधम्। मासद्वयात्तथा चूर्णं हीनवीर्यात्वमाप्नुयात्।।
हीनत्वं गुटिकालेहौ लभेते वत्सरात्परम्। हीनाःस्युः घृत तैलाद्याश्चतुर्मासाधिकात्तथा।।
ओषध्यो लघुपाकाः स्युर्निर्वीर्या वत्सरात्परम्। पुराणाःस्युर्गुणैर्युक्ता आसवा धातवो रसाः।।

(Sha. Sam Pra. Kha, 1/51-53)

S.No.	Dravya / Dosage form	According to Sharangadhara	According to Yogaratnakara
1	Raw Drug	1 year	
2	Choorna	2 months	3 months
3	Gutika, Avalehya	1 year	6 months
4	Ghrita, Taila	1 year 4 months (16 months)	1 year
5	Laghupaka oushadhi	1 year	
6	Asava, Arista	Infinite	
7	Dhatu (metallic preparation), Rasa (Mercurial preparation)	Infinite	
8	Swarasa		1 yama-3 hrs
9	Kalka		1 yama-3 hrs
10	Kwatha		3 months
11	Anjana		

As per CCRAS guidelines

Based on the Gazette of India, Extraordinary, vide number G.S.R 897(E), dated the 24th November, 2015, amendment was done to the Drugs and Cosmetics Rules, 1945, related to the the shelf life or date of expiry of an ASU medicines.

S.No.	Dosage form	Shelf life or date of expiry with effect from the date of Manufacture
1	Anjana	
	a) Anjana made from Kasthaushadhi	1 year
	b) Anjana made from Kasthaushadhi alongwith Rasa/Uparasa/Bhasma	2 years
	c) Anjana made only from Rasa/Uparasa/ Bhasma	3 years
2	Arka	1 year
3	Asava Arista	10 years
4	Avaleha, Khanda, Paka, Guda	3 years
5	Churna, Kwatha Churna, Lepa Churna, Danta Manjan (Churna)	2 years
6	Dhoopana	2 years
7	Dravaka, Lavana, Kshara	5 years
8	Ghrita	2 years
9	Guggulu	5 years
10	Gutika/Vati	
	(I) Gutika or Vati containing Kasthaushadhi alongwith Rasa/Uparasa/Bhasma/Guggulu (including Lepa Gutika and Ghana Vati)	5 years
	(II) Gutika or Vati containing only Kasthaushadhi	3 years
	(III) Gutika/Vati containing only Rasa/Uparasa /Bhasma except Naga, Vanga and Tamra Bhasma	10 years
11	Karna/Nasabindu	2 years
12	Kupipakva Rasayana	10 years

13	Malahara	3 years
14	Mandura-Lauha	10 years
15	Naga Bhasma, Vanga Bhasma and Tamra Bhasma	5 years
16	Netrabindu	1 year
17	Parpati	10 years
18	Pishtiand Bhasma except Naga, Vanga and Tamra Bhasma	10 years
19	Pravahi Kwatha	3 years
20	Rasayoga	
	(I) Rasayoga Containing only Rasa/Uparasa/ Bhasma except Naga, Vanga and Tamra Bhasma	10 years
	(II) Rasayoga Containing Rasa/Uparasa/ Bhasma along with Kasthaushadhi/Guggulu	5 years
21	Sattva (derived from medicinal plant)	2 years
22	Sharkara/Panaka/Sharbat	3 years
23	Shvetaparpati	2 years
24	Taila	3 years
25	Varti	2 years

The Saviryata avadhi is an indicative of 'Best before use date'. This is the time limit after which one or more properties of the formulations would have shown considerable changes/degradation which can be seen or perceived by the consumers/patients and lead to doubts about the quality of the product and ultimately on its efficacy. However, if a drug is Avipanna (not influenced by environmental factors) and have its original Gandha (smell), Rasa (taste), Rupa (physical state), it can be used even it is older one because it may indicate that there is no change in the physical or chemical characters. Though Ayurveda has judiciously explained the subjective criteria for the assessment of Virya of a drug, but those are not sufficient to assess the potency. Those parameters described by them in that period were really admirable, scientific, and show their keen observation but in today's era such parameters are not sufficient and hence new objective parameters for measuring these properties are to be searched out. Packaging and storage conditions should be specific and Anurupa Guna (similar quality) according to dosage form and the API which the drug contains so that the unwanted effects of these factors be overcome.

In the ancient period when there was no industrialization and Vaidyas themselves used to prepare the drug in small scale for the treatment of their patient and their main objective of formulation, of a drug, was to achieve the desire action rather than secondary mean of palatability or shelf life but in today in the era of globalization and

large scale production, there was need to re-determine the revised stability period of these kinds of Ayurvedic formulations by following a suitable guidelines. Now a days, due to usage of permissible preservatives, development and adaptation of packaging and storage technology by Ayurvedic industries, a need arises to re-study and re-establish the newer ones. So based on Stability and other studies, revision was done for the shelf life of the ASU medicines.

5. Aushadha Matra (Posology)

Posology is the branch of medicine concerned with the determination of appropriate doses of drugs or agents. The therapeutic action of the medicament depends upon the quantity which is administered and the quantity which has got absorbed. It is very much essential to fix the dose of the medicament depending upon the age of the patient, disease etc.

As per Ayurveda there is no fixed dose for all. It depends on many factors, In Sharangadhara Samhita it is explained as

स्थितिर्नास्त्येव मात्रायाः कालमग्निं वयो बलम्।। प्रकृतिं दोषदेशौ च दृष्टवा मात्रां प्रकल्पयेत्।

(Sha. Sam Pra. Kha, 1/37)

Dose of medicine has to be decided by considering Kala (Season), Agni (Digestive capacity), Vaya (age), Bala (Physical Strength), Prakriti (Body Constitution), Dosha (Taratama bhava of the Doshas) and Desha (Bhoomi and Deha) of the patient.

तत्र सर्वाण्येवौषधानि व्याध्यग्निपुरुषबलान्यभिसमीक्ष्य विदध्यात्। तत्र, व्याधिबलादधिकमौषधमुपयुक्तं तमुपशम्य याधिंव्याधिमन्यमावहति, अग्निबलादधिकमजीर्णं विष्टभ्य वा पच्यते; पुरुषबलादधिकं ग्लानिमूर्च्छामदानावहति संशमनम्; एवं संशोधनमतिपातयति। हीनमेभ्यो दत्तमकिंचित्करं भवति। तस्मात्सममेव विदध्यात्।। (Su. Sam. Su. St, 39/10)

Sushruta while explaining the importance of dose of the drug, mentioned that dose has to be fixed based on Vyadhi, Agni, Purusha and bala of the patient. If the high dose or high potency drug is administered in less severe condition it subsides the disease but causes complications. If Drug is administered when Agnimandhya is present, leads to Ajirna and Vistambha. Apart from these it may also causes glani, murcha and mada if the administered drug is Samshamana. If it is for shodhana, then it causes excessive shodhana.

General Dose According to Sharangadhara

बालस्य प्रथमे मासि देया भेषजरक्तिका।। अवलेहीकृतैकैव क्षीरक्षौद्रसिताघृतैः। वर्धयेत्तावदेकैकां यावद्भवति वत्सरः।। मासैर्वृद्धिस्तदूर्ध्वं स्याद्यावत्षोडशवत्सरः। ततः स्थिरां भवेत्तावद्यावद्वर्षाणि सप्ततिः।। ततो बालकवन्मात्रा ह्रासनीया शनैः शनैः। मात्रेयं कल्कचूर्णानां कषायाणां चतुर्गुणा।। (Sha. Sam Pra. Kha, 6/14-17)

S.No.	Age of the patient	Dose
1	1 month	1 ratti (125 mg)
2	2 months	2 ratti (250 mg)
3	3 months	3 ratti (375 mg)

4	4 months	4 ratti (500 mg)
5	5 months	5 ratti (625 mg)
6	6 months	6 ratti (750 mg)
7	7 months	7 ratti (875 mg)
8	8 months	8 ratti (1 gm)
9	9 months	9 ratti (1 gm 125 mg)
10	10 months	10 ratti (1 gm 250 mg)
11	11 months	11 ratti (1 gm, 375 mg)
12	12 months (1 year)	12 ratti (1 ½ gm)
13	2 years	12 ratti + 1 masha (2 ½ gm)
14	3 years	12 ratti +2 masha (3 ½ gm)
15	4 years	12 ratti + 3 masha (4 ½ gm)
16	5 years	12 ratti + 4 masha (5 ½ gm)
17	6 years	12 ratti + 5 masha (6 ½ gm)
18	7 years	12 ratti + 6 masha (7 ½ gm)
19	8 years	12 ratti + 7 masha (8 ½ gm)
20	9 years	12 ratti + 8 masha (9 ½ gm)
21	10 years	12 ratti + 9 masha (10 ½ gm)
22	11 years	12 ratti + 10 masha (11 ½ gm)
23	12 years	12 ratti + 11 masha (12 ½ gm)
24	13 years	12 ratti + 12 masha (13 ½ gm)
25	14 years	12 ratti + 13 masha (14 ½ gm)
26	15 years	12 ratti + 14 masha (15 ½ gm)
27	16 years to 70 years	12 ratti + 15 masha (16 ½ gm)
28	71 years	12 ratti + 14 masha (15 ½ gm)
29	72 years	12 ratti + 13 masha (14 ½ gm)
30	73 Years	12 ratti + 12 masha (13 ½ gm)
31	74 Years	12 ratti + 11 masha (12 ½ gm)
32	75 years	12 ratti + 10 masha (11 ½ gm)
33	76 years	12 ratti + 9 masha (10 ½ gm)
34	77 years	12 ratti + 8 masha (9 ½ gm)
35	78 years	12 ratti + 7 masha (8 ½ gm)
36	79 years	12 ratti + 6 masha (7 ½ gm)

Dose of Drugs as per Kashyapa

S.No.	Age of the Child	Dose
1	Just born	Badaraphala bijatulya
2	5-10 days	Increase gradually
3	11-20 day	Half badara phala
4	21-30 days	Badaraphala
5	1-2 months	1 ½ badara phala
6	3 months	2 badara phala
7	4 months	Shushka Amalaki pramana
8	5-6 months	Amalaki phala pramana
9	7-8 months	Bigger the Amalaki pramana

Dose as per Sushruta

तत्र मासादूर्ध्वं क्षीरपायाङ्गुलिपर्वद्वयग्रहणसंमितामौषधमात्रां विदध्यात्कोलास्थिसंमितां कल्कमात्रां क्षीरान्नादाय, कोलसंमितामन्नादायेति।। (Su. Sam. Sha. St, 10/43)

S.No.	Age	Dose
1	1 month	1 pinch
2	Ksheerannada	Kolasti
3	Annada	Kola

6. Anupana and Sahapana

अनु पश्चात्सह वा पीयते इत्यनुपानम्। अल्पदोषमदोषं वाऽप्यनुपाने न जीर्यति।। (A.Hri.Su.St. 8/50, Hemadri)
अनु पश्चात्पीयते इति अनुपानम्। अनुपश्चात्वा अनुसाकं पीयते इति अनुपानम्। (Cha.Sam.Su.St. 27/319 chakrapani teeka)
अन्नाद् अनुपश्चात्पीयते इति अनुपानम्। (Su. Sam.Su St 46/419, Dalhana teeka)
अनुपानम् इति अनु पश्चात्पानं तत्। (Sha. Sam, Ma. Kha, 8/4. Adamalla)

Anupana is the liquid administered after or along with the medicine or with the food. In case of alpa dosha, Anupana itself acts as medicine. Some Acharyas claim that anupana and sahapana are one and the same.

Importance of Anupana

यत्किञ्चिदौषधं वैद्यैर्देयं रोगानुपानतः। तत्तदगुणकरं ज्ञेयमनुपान बलादिह।। (Y. R.)

Proper anupana administered along with the medicine will enhance activity of the medicine. This indicates the importance of anupana with the medicine.

Mechanism of Action of Anupana

यथा तैलं जले क्षिप्तं क्षणेनैव प्रसर्पति। अनुपानंबलादङ्गे तथा सर्पति भेषजम्। (Sha.Sam, Ma.Kha. 6/5)

Anupana helps the medicines to spread quickly in the body like the oil spreads quickly on water surface.

Benefits of Anupana

अनुपानं हितं युक्तं तर्पयत्याशु मानवम्। सुखं पचति चाहारमायुषे च बलाय च। (Cha. Sam. Su. St. 27/326)

Proper anupana administered along with medicine or Ahara causes Tarpana of the shareera quickly, helps in easy digestion, helps to improve the strength of the person.

अथानुपानकर्मगुणान्प्रवक्ष्यामः- अनुपानं तर्पयति, प्रीणयति, ऊर्जयति, बृंहयति, पर्याप्तिमभिनिर्वर्तयति, भुक्तमवसादयति, अन्नसंघातं भिनत्ति, मार्दवमापादयति, क्लेदयति, जरयति, सुखपरिणामितामाशुव्यवायितां चाहारस्योपजनयतीति। (Cha. Sam. Su. St. 27/325)

Properly administered Anupana brings Satiation, gratification, energy anabolism (nutrition), feeling of completeness or fullness, it settles down the ingested food, breaks down the lump of food, softens, moistens and digests the food and then helps in easy and proper transformation and quick absorption of food.

Effect of Ideal Anupana

विपरीतं यदन्नस्यगुणैः स्यादविरोधि च। अनुपानंसमासेन सर्वदातत्प्रशस्यते।। (A. Sam,Su. St. 8/51)

Anupana should be opposite to the properties of the food, and it should not be harmful to the body.

Anupana For Different Diseases

स्निग्धोष्णं मारुते शस्तं पित्ते मधुरशीतलम्। कफेऽनुपानं रूक्षोष्णं क्षये मांसरसं पयः। (Cha. Sam. Su. St 27/ 321)

स्निग्धोष्णं मारुते पथ्यं कफे रूक्षोष्णमिष्यते। अनुपानं हितञ्चापि पित्ते मधुरशीतलम्।। (Su. Sam. Su. St, 46/435)

S.No.	Vyadhi	Anupana
1	Vata roga	Snigdha and Ushna
2	Pitta roga	Madhura and sheeta
3	Kaphaja roga	Ruksha and ushna
4	Kshaya	Mamsa rasa

Anupana and Ahara

तदादौ कर्शयेत्पीतं स्थापयेन्मध्यसेवितम्। पश्चात्पीतं बृंहयति तस्माद्वीक्ष्य प्रयोजयेत्।। (Su. Sam. Su. St, 46/444)

Anupana shows different effect when it is administered at different timings of annakala.

1. Krishatwa- Beggining of food
2. Samyata- Middle of the food
3. Brihmana- End of the food

Contraindications of Anupana

न पिबेत्श्वासकासार्तो रोगे चाप्यूर्ध्वजत्रुगे। क्षतोरस्कः प्रसेकी च यस्य चोपहतः स्वरः।। (Su. Sam. Su. St, 46/445)

Anupana is contraindicated in: 1. Swasa; 2. Kasa: 3. Urdhwajatrugata vikara: 4. Urakshata: 5. Praseka; and 6. Swarabramsha

Best Anupana Dravyas

सर्वेषामनुपानानां माहेन्द्रं तोयमुत्तमम्। सात्म्यंयस्यतुयतोयंतत्तस्मैहितमुच्यते।। (Su. Sam. Su. St, 46/439)

अनुपाने तु सलिलमेव श्रेष्ठं सर्वरसयोनित्वात्सर्वभूतमात्म्यत्वाज्जीवनादिगुणयोगाच्च। (A. Sam. Su. St 10/11)

Among all the anupana, some are considered as best like, Mahendra jala (Rain water), Jala. Apart fron these Asava, Arista, Yusha, Phala swarasa, Kanji, Phalamla, Ksheera, Takra, Madhu, Shitaja, Ushna jala, Mamsa rasa, Oushadha swarasa, Kwatha, Hima, Arka etc.

Sahapana

अर्थःसन्दर्भश्चः (सहमिलित्वापानम्।) एकत्रमद्यभक्षणम्। तत्पर्य्यायः। सर्पीतिः। (Hemachandra)

तुल्यपानम्। (Amarakosha 2/9/55)

सहपीतः।। (Shabdaratnavali)

यद्योगेन रसादीनां विभक्ताः परमाणवः। द्रुतमंगेषु सर्पन्ति सहपानं तदुच्यते।। (R.T. 6/199)

A Yoga in which Rasoushadies disintegrate into minute particles and quickly absorb and spread in the body is Sahapana. There is no much explanation available about Sahapana. With the available explanation we can conclude that sahapana is liquid administered along with the food or medicine. Some Acharya considered Anupana and Sahapana are one and the same which may be administered along with or after the food or medicine.

Yougika Dravya Siddhanta

विरुद्धवीर्यमाप्येषां प्रधानानामबाधकं। अधिकं तुल्यवीर्यं हि क्रियासामर्थ्यमिष्यते।। (Cha. Sam. Ka. St 12/45)

In a compound preparation, if it is necessary to add the drug having opposite veerya, then the drug should be selected in such a way that it should not hinder or suppress the action of the main drug. Eg. Ela in Madanaphala yoga, Ela alone if it administered acts as an Antiemetic, but if it is an ingredient in Madanaphala yoga it doesn't hinder the action of Madanaphala.

Discussion

Fundamental Principles are the basic principles of any science or Philosophy from which further development happens. Synonyms are basic principles, basics, bedrock, and fundamentals. In Ayurvedic Pharmaceutics basic principles are related to the preparation of medicine, as medicine is the second important pillar for successful treatment. For the preparation of potent medicine, we have to follow these basic principles.

Conclusion

For the preparation of potent medicines, the knowledge of the factors mentioned under Adharabhuta Siddhana (Fundamental Principles) are very much essential.

CHAPTER THREE

Extended Learning

- Discuss the application of fundamental principles with classical examples of various kalpas.
- Discuss the Principle and rationality behind the drug collection.
- Define Samskara. Discuss role of Samskara in Ayurvediya Aushadhi Nirmana along with various examples.
- Chrono- Therapeutics.

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MODEL QUESTIONS

Short Answers

- Describe in brief the fundamental principles of Bhaishajya Kalpana.
- Describe the basic principle of Aushadha Nirmana.
- Write a note on Anukta and Visheshokta Dravya ghrahana.
- Explain the method of Drug Collection.
- Method of preservation of the drugs.
- Criteria for Aushadha Namakarana.
- Saveeryata Avadhi of different dosage forms.
- Saveeryata avadhi of different dosage forms as per recent Indian Gazette.
- Explain Aushadha sevana kala.
- Time of collection of different parts of the plant.
- Difference between Anupana and Sahapana.
- Pranija dravya samgraha.